

What is Stacking?

Objective

Some network switches have the ability to be connected to other switches and operate together as a single unit. These configurations are called "stacks", and are useful for quickly increasing the capacity of a network.

The objective of this document is to explain the basics of stacking and the benefits it can bring to a network.

Applicable Devices | Firmware Version

- SG350X | 2.3.0.130
- SG350XG | 2.3.0.130
- SG550X | 2.3.0.130
- SF550X | 2.3.0.130
- SX550X | 2.3.0.130
- CBS350-2X | 3.0.0
- CBS350-4X | 3.0.0

A **stack** is a network solution composed of two or more stackable switches. Switches that are part of a stack behave as one single device. As a result, a stacking solution shows the characteristics and functionality of a single switch, while having an increased number of ports.

For a full length explanation of stacking, please view the video below:

Why Stacking?

Stacking allows users to expand their network capacity without the hassle of managing multiple devices.

Stackable switches can be added or removed from a stack as needed without affecting the overall performance of the stack. Depending on its topology, a stack can continue to transfer data even if a link or unit within the stack fails. This makes stacking an effective, flexible, and scalable solution to expand network capacity.

Stacking Terminology

If you are unfamiliar with the terms used below, check out [Cisco Business: Glossary of New Terms](#)

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All Cisco Business stacks have an **Active switch**, or commander. The Active switch is a switch in the stack that handles the configuration for the entire stack. When you want to manage your stack, the Active switch is the device that you connect to in order to make changes. The Active switch also handles other important stack functions, such as detecting when switches enter or leave the stack, and upgrading outdated switches.

A **Standby switch** is a switch that will become the new Active switch if the original Active switch goes offline. In this way, a backup helps maintain the resiliency of the stack.

A **Member** is a stackable switch that operates as an additional unit within the stack.

A **stack port** is a port on the switch that is used to communicate with other switches in the stack. Depending on the model, a switch can have either preconfigured or user-defined stack ports.

Conclusion

After reading this document, you've hopefully gained a better understanding of what stacking is and how it can benefit your network.

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